DOCUMENT RESUME

ED 248 031 PS 014 518

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TITLE Predictors of Father Involvement in Childcare.
PUB DATE Apr 83
NOTE 37p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (Detroit, MI, April 21-24, 1983).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Academic Achievement; *Child Rearing; Chronological Age; Comparative Analysis; Family Structure; *Fathers; Followup Studies; *Middle Class Parents; Mothers; Occupations; Parent Child Relationship; *Parent Role; *Predictor Variables; Preschool Children; Sex Differences; Sex Role; Socialization; Socioeconomic Status; *Whites
IDENTIFIERS Nurturance; *Primary Caregivers

ABSTRACT

A study was made to assess whether middle-class men who were primary caregivers for their preschool-age children continued as such when their children were of school age. The attempt was made to predict level of paternal involvement 4 years later; also explored were the stability and predictors of father involvement over a 4-year period when the men initially had no major childrearing role. The sample consisted of 59 middle class, primarily white, intact families with preschoolers of age 3 to 5 in 1977. Results indicated that a number of factors influenced the father's role in the socialization process, but that these factors differed in importance in the context of different family structures. Specifically, influential factors included the father's efforts to compensate for or model his own father's role in child care, the nature of father interactions with the child, the sex of the child, and the father's education and occupation. Also influential, but to a lesser extent, were the mother's education and sex-role orientation, and the father's age. It appeared that high father involvement was a stable and enduring pattern: upon assessment when their children were 7 to 9 years of age, men who took a major role in child care early on were not found to have retreated into a traditional, uninvolved paternal role. (RH)

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Predictors of Father Involvement in Childcare

Norma Radin and Rena Goldsmith

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PS 014518

Paper presented at the biennial meeting of the Society for Research in Child Development, Detroit, Michigan, April 21, 1983

Despite the proliferation of research on fathering in recent years (Clarke-Stewart, 1978; Field, 1978; Gersick, 1979; Lamb, 1981; Levine, 1976; Mendes, 1976; Parke, 1979; Pleck, 1979, Santrock & Warshak, 1979), there is still much to be learned. Among the unresolved issues are the stability of intensive father involvement in caring for children and the antecedents of that intensive involvement. There have been some investigations exploring the latter question (Radin, 1978, 1981a, 1982; Radin & Sagi, 1982; Russell, 1978, 1982; Sagi, 1982; Lamb, Frodi, Hwang, & Frodi, 1982) but few of these studies were longitudinal in nature. Thus, unambiguous information about predictors, and data about the duration of father participation in childrearing are very scarce. Further, as none of the handful of longitudinal studies of highly involved fathers focused upon preschool aged children, data for this group are entirely missing. Information about precursors and duration of paternal childcare in two-parent families is of significance to child development theory for it contributes to an understanding of the socialization process from a family perspective. The information is of interest to clinicians as well for it provides those counseling couples who are involved in egalitarian or father-primary-caregiver patterns with valuable insights into factors affecting the functioning of such families.

The study to be described attempted to answer the question of whether middle-class men who had the primary responsibility of caring for their preschool children in intact families continue to be primary caregivers when the children are school-aged, and to determine whether any information available about the families in

the initial investigation foretold the level of paternal involvement four years later. Also to be explored were the stability and predictors of father involvement over a four year period when the men initially did not have the major role in raising their preschool-aged children.

Hypotheses

Role theory would lead one to predict that playing a traditional role, such as that of father, in a deviant fashion would lead to pressure from peers and family members to conform to the expectations of others and revert to a more traditional pattern (Feld & Radin, 1982; Biddle & Thomas, 1966). Theories of role-making (Aldous, 1974) also link the creating of new family roles with more stress. Thus it could be predicted that men who were highly involved in caring for their preschool children would be less stable in maintaining that arrangement than their more traditional peers. Empirical data tend to support that prediction; in conducting a follow-up of men who were primary caregivers of children ranging in age from infancy to adolescence, Russell (1982) found that only 22% were still following the same pattern two years later. Similarly, Lamb et al. (1982) observed that men in Sweden who started out taking paternity leave to care for their infants did not maintain a high level of involvement 16 months later (Radin & Russell, 1983).

Neither theory nor data provide sufficient support for any other hypotheses. There were indications from the 1977 study that men heavily involved in childrearing had a lower socio-economic status than their traditional peers (Radin, 1982; Radin & Sagi, 1982). However, this can be interpreted as childrearing activities influencing a father's socio-economic status as readily

as socio-economic status influencing childrearing. Regarding fathers' perceptions of their own fathers, concurrent measures yielded a positive relationship in an Israeli study (Radin & Sagi, 1982; Sagi, 1982) but no relationship to concurrent childrearing in a U.S.A. sample (Radin, 1982; Radin & Sagi, 1982). Paternal nurturance as assessed by questionnaire data was also found to be correlated with paternal involvement in the Israeli sample but not in the U.S. sample when assessed either by questionnaire responses or by observational data (Radin & Sagi, 1982; Radin, 1981a, 1982). Sex role orientation, as assessed by the Bem Sex Role Inventory (Bem, 1974) was found in an Australian study to be related to father involvement (Russell, 1978, 1982) but not in a Swedish study (Lamb et al., 1982) or in a study conducted in the United States (Radin, 1978, 1981a, 1982). Finally, mothers' perceptions of their own fathers were found to be linked to their husband's participation in childcare (Radin, 1982), but there is no reason to believe this association persists for four years.

Thus no hypotheses appear warranted concerning parental socioeconomic status, sex-role orientation, perceptions of paternal involvement in the family of origin, or paternal nurturance as predictors of father involvement after a four year period. However the relationship of all of these variables to subsequent paternal involvement in childrearing deserves exploration. Sex-of-child also merits exploration as a mediating variable because of numerous findings indicating that father behavior differs with boys and girls (Parke & Swain, 1976, 1980; Weinraub & Frankel, 1977; Belsky, 1979; Lamb, 1977; Radin, 1981b; Tauber, 1979).

Sample and Procedure in the 1977 Initial Study

The sample that was followed consisted of 59 middle-class, primarily white, intact families with a preschool child aged 3 to 5 in 1977, 32 with sons and 27 with daughters. The parents were self-selected for they had been recruited through various public notices announcing a search for participants in a study of fathers with a large role in rearing preschoolers. Traditional families were sought through word of mouth since they were so numerous. Mothers and fathers who were participants in the study were interviewed separately, in their own homes in almost all cases, using the identical questionnaire. Included in the information collected were specific details about the amount of father involvement in various aspects of childrearing. Based on these responses, scores were given to each parent for five categories: statement about overall amount of father involvement in childcare; amount of father involvement in socializing the child (e.g., teaching the child right from wrong); amount of father involvement in physically caring for the child (e.g., feeding the youngster); the father's involvement in decision-making about the child (e.g., regarding when the child is old enough to try new things); and the father's availability to the child (e.g., how often he is home at lunchtime). A total score for father involvement was obtained for the mother and for the father by adding the scores each had obtained on the five components. The mother total and father total scores were then combined for a grand total score for father involvement. There appeared to be general agreement between mothers and fathers regarding the father's involvement: the correlation between the two totals was .76, $p < .001$.

During the interview, information was also obtained about

parents' sex-role orientation, demographic characteristics, efforts to stimulate the cognitive development of the child, perceptions of their own father's role in childrearing, and views of their own nurturance with their preschooler as well as the nurturance of their spouses. In addition, to assess father behavior with the child, the preschooler was asked to be present during the interview with the father to complete some tasks and the entire session was audiotaped. It was assumed that the child would become restless waiting for the tasks to be administered at the end of the parent interview and the father would have to handle the restlessness, as well as any other behaviors initiated by the child, in some fashion. Scores were obtained for the frequency of 26 categories of paternal behavior, e.g., consulting with the child, threatening the child, reinforcing the child, during the 30 contiguous minutes of the tape with the most father-child interactions. These categories were then collapsed into three global categories, nurturance, restrictiveness, and behaviors that were neither nurturant nor restrictive. (The latter was not included in the data analysis because it lacked conceptual clarity). The total number of father-child interactions and the frequency of child-initiated behavior was also computed for each pair. The latter category was derived from father behaviors which were clear responses to initiatives of the child, e.g., father stops to listen to child, father continues talking when child speaks. Details of the observational procedure were reported elsewhere (Epstein & Radin, 1975; Radin, 1970, 1971, 1972, 1981a; Radin & Epstein, 1975).

For some analyses, the 59 families were divided into three

equal groups based on the grand total of the father involvement score: father primary caregiver group, mother primary caregiver group, and the intermediate group. There were 20 families in the first group (10 with boys and 10 with girls), 20 in the second group (11 with boys and 9 with girls), and 19 in the third (11 with boys and 8 with girls). The labels were validated by the average in each group of both parents' global estimate of the percentage of time the father was the primary caregiver when the child was awake and not with a caretaker. For the father primary caregiver it was 57%; for the traditional group it was 22%; and for the intermediate group it was 41%. Further information about the 1977 study is available elsewhere (Radin, 1981a, 1982; Radin & Sagi, 1982).

Sample and Procedure in the 1981 Follow-Up Study

In 1981, all 59 families were contacted by mail and asked to participate in a follow-up study. Several letters were returned because the families had moved and left no forwarding address. Efforts were then made to find these participants through the use of any clue available in the data that had been collected, primarily names of employers. Eventually all but two of the 59 families were located and all families except one agreed to take part in the follow-up investigation. Of the three families who were lost, one had been in the intermediate group and two in the traditional group. The one refusal was from the latter group. Eighty-seven parents who lived near Ann Arbor were interviewed in person and each parent was seen separately as before. The 12 families who lived out-of-town were mailed two questionnaires and asked by mail, and by phone in all cases, to have each parent complete a questionnaire independently. (These families included

three who had been in the mother primary caregiver group in the initial study, five who had been in the intermediate group, and four who had been in the highly involved father group). One mother living out-of-town was also sent a questionnaire. Among the states from which the participants mailed in their responses were New Hampshire, Connecticut, Illinois, California, Pennsylvania, and Washington. Responses were also received from Washington, D.C., and Venezuela.

The interview, which took place in each parent's home, took approximately one hour. The questions regarding father involvement were identical to those posed in 1977 with the exception of a few items related to the socialization and physical care of the child. These items were altered somewhat to be more appropriate for the current age of the child, e.g., instead of asking for the frequency of father's feeding the child, the question posed was about the frequency of preparing meals for the child. Also identical to the 1977 questionnaire were questions concerning the current demographic and marital status of the families. As was true in the initial study, parts of the interview were structured and parts unstructured.

Scores for father involvement in childrearing for the 47 families which had remained intact were computed for each mother and each father, that is, scores for the five components were computed as in the initial study, and a total score obtained for each parent. A grand total score of father involvement was again obtained by adding the mother and father total scores. Again, there was high agreement between mothers and fathers in their appraisal of the father's involvement as the correlation between the two scores was .74, $p < .001$.

To test the hypothesis generated, paired *t*-tests were employed comparing the three total scores for father involvement (mother total, father total, and grand total) obtained in 1977, to be referred to as time 1, and in 1981, to be referred to as time 2. Scores obtained time 1 for the 5 components were also compared with the component scores obtained time 2 for both mothers and fathers through the use of the paired *t*-test. These comparisons were made for the total sample as well as for sex-of-child subgroups and for each of the initial father-involvement groups, father primary caregiver, mother primary caregiver, and intermediate group.

In addition, Pearson product moment correlation coefficients were computed for the total and for the component scores of father involvement obtained time 1 and time 2 for the total sample and for sex-of-child and father-involvement subgroups. The sample was not large enough to examine by sex-of-child and father-involvement subgroups simultaneously. At time 2, there were 8 boys and 8 girls in the mother primary caregiver group, 9 boys and 7 girls in the intermediate group, and 7 boys and 8 girls in the father primary caregiver group.

To explore the antecedents of father involvement present at time 2, scores for time 1 variables cited above as warranting further investigation were correlated with the time 2 father involvement scores, specifically, parents' perceptions of their own fathers' involvement in their upbringing, parents' scores on the sex-role scale employed, the Bem Sex Role Inventory (Bem, 1974), parents' demographic characteristics, and paternal nurturance as assessed by observational data and by questionnaire data provided by both parents. Stepwise multiple regression

equations were then computed using the three total scores for father involvement (mother total, father total, and grand total) obtained time 2 as the dependent variables, and the time 1 variables which were most highly correlated with total father involvement scores as the independent variables. These equations were computed for the total sample and for the five subgroups investigated, boys, girls, and the three father involvement groups of 1977.

It should be noted that mother's employment status and income could not be tested as antecedents because, by design, no mother who worked over 10 hours per week was included in the mother primary caregiver group. If one was found when the sample was being collected, the family was eliminated from this investigation and included in a dissertation study being conducted by a staff member on working mothers who were also primary caregivers (Carlson, 1980, 1981).

Results

In Table 1 are presented the results of the t-tests employed to compare the total and component scores in 1977 and 1981 for the total group and the five subgroups. It can be seen that father involvement decreased in the father primary caregiver group to a greater extent than in the mother primary caregiver group or in the intermediate group. In the high father involved group all three total scores decreased significantly, as well as four of the five components for father responses and two of the five for mother responses. In contrast, in the intermediate group only one component changed significantly, and it increased. In the mother primary caregiver group one component decreased significantly and another increased significantly. The table also indicates that

there was a sex difference in the reduction in father involvement. For girls, two total scores and two of the components from maternal responses showed significant decreases. There was only one component that decreased significantly for boys and none of the total scores. The results for the total sample mirror those obtained for girls; there was a significant decline in two total scores and two components.

As further evidence of the differential decline in father involvement in the three father involvement groups, it was found that 72% of the families initially in the mother prime group and 56% in the intermediate group would remain in the same group if the cut-off points in grand total score used to establish the three groups in 1977 were employed in 1981. However, only 25% of those in high father involved group would still be in the same group, a figure remarkably close to Russell's (1982) 22%. For the sample as a whole, 50% would remain in the same group, 5% would be placed in a group reflecting more father involvement, 28% in a group with less father involvement, and 16% of the families were divorced or separated (five families in the high father involved group, and two in each of the other two groups). Thus there was an overall decline in father involvement but the decline occurred primarily in the group of families which initially had the greatest amount of father participation in childrearing.

The relative stability of the three father involvement groups was also assessed by comparing the correlations of time 1 and time 2 total scores for father involvement in the three father involvement groups. The results appear in Table 2. In contrast to the data obtained when t-tests were employed, correlational analyses revealed that the highest correlation for grand total

score was obtained by families classified as father primary caregiver in 1977. In this group, the correlation was .66, ($p < .01$). For the other two groups, the correlations were not significant. Similarly, the total scores for mothers' responses concerning father involvement time 1 and time 2 were significantly correlated only in the original father primary caregiver group where the correlation was .68, $p < .01$.

In Table 3 appear the results obtained when the correlations between time 1 and time 2 total father involvement scores were computed for boys and girls separately. It was found that the correlation between grand total scores for girls was highly significant, $r=.88$ ($p<.001$). For boys however the correlation was not significant ($r=.30$). Similarly, the correlation between the two father total scores and two mother total scores were significant for girls ($r=.73$, $p<.001$ and $r=.83$, $p< .001$ respectively) but not for boys where the r's were .28 and .32. It should be noted that there were no significant differences in total father involvement scores between families of boys and families of girls in 1977 or in 1981.

The significant correlations obtained between time 1 variables explored as possible antecedents and the time 2 total scores for father involvement also appear in Tables 2 and 3. In Table 4 are presented comparable data for the total sample. It is evident that there were sharp subgroup differences. For sons, father's demographic characteristics were positively correlated with amount of father participation in childcare, and the father's views of his own father's involvement in his upbringing were negatively correlated. In addition, scores for observed father

nurturance, total number of father interactions with the child during the observational session, and child initiations were all positively associated with father involvement four years later; observed restrictiveness was not. For girls, only mother's perceptions of her own father's involvement was significantly correlated with time 2 father involvement scores and the correlation was negative. None of the 1977 observational or demographic variables were associated in 1981 with father involvement in families with daughters.

In the father primary caregiver group, perceptions of both mothers and fathers of their own father's involvement were significantly linked to father involvement four years later, and the correlations were positive. Mother's assessment of her own father's nurturance was also positively associated with subsequent involvement of her husband in rearing their children. As for the mother primary caregiver group, mothers' and fathers' perceptions of their own fathers' involvement were negatively correlated with father involvement in 1981, as were both mothers' and fathers' views of their own fathers' nurturance. The sex of the child and mother's education were also relevant; there was more father involvement if the child was a male and the mother had more education in 1977. The intermediate group is similar to the mother primary caregiver group in that parents' perception of their own father's involvement were generally negatively associated with father involvement at time 2. In addition, in this group, the older the father, the more involvement in childcare.

The pattern for the total group reflects the patterns of the subgroups: the time 1 and time 2 total father involvement scores

were significantly correlated but the correlation coefficients were not as great as they were when only families with daughters or families with high father involvement were considered. For example, the correlation between the time 1 and 2 grand total scores was .56 for the total group but .77 for families with daughters. In the total sample, father's perception of his father's nurturance and mother's perceptions of her father's availability were both negatively associated with father's involvement in childcare four years later. In addition, observational scores obtained in 1977 were positively correlated with paternal childcare in 1981.

Not included in Tables 2-4 were data concerning the Bem Sex Role Inventory scores. Only one correlation was significant, that involving the mother's score on femininity in 1977, and the father total involvement score in 1981 for the intermediate group. The correlation was $-.54$ ($p<.05$): the less feminine the mother in this group, the more father participation in childrearing.

In Table 5 appear the results of stepwise multiple regression equations computed for the total sample and 5 subgroups when the predictors employed were the time 1 variables correlating most highly with any of the three total scores, and among those variables were observational data. In an effort to maintain a ratio of 10 subjects for each independent variable entered into the equation, only one observational variable was entered per equation and only those equations in which an observational variable emerged as significant were included in the table.

From Table 5 it can be seen that approximately 45% of the variance in the total scores in the entire sample, and approximately 55% of the variance in total scores in families with

boys can be explained by three independent variables, one of which pertains to the observed interactions between father and child in 1977. For the total group, the other predictor variables were the time 1 grand total involvement score with a positive beta weight, and fathers' perceptions of their own fathers' nurturance with a negative beta weight. For boys, the other significant independent variables were father's SES, with a positive beta weight and father's statement about his own father's involvement with a negative beta weight. In all cases, the observational variables carried a positive beta weight. It is notable that mother's views of her own father's availability did not explain any of the variance in total scores.

In Table 6 appear the results of the stepwise multiple regression equations computed for the total sample and the five subgroups when the variables correlating most highly with the total scores, except observational data, were included as predictor variables. This procedure was followed as the N's were somewhat lower in equations containing observational variables due to spoilage of a few tapes. Once again, a ratio was maintained of close to 10 subjects for each independent variable entered into the equation, and no equation was included in the table unless it contained more than one significant beta weight. It can be seen that for girls, almost 80% of the variance in total mother score can be explained by the two variables of initial grand total score for father involvement with a positive beta weight, and mother's perception of her own father's availability during her childhood with a negative beta weight. In the total sample, over one-third of the variance in grand total score and mother total score can be explained by the time 1 grand total score for father involvement

with a positive beta weight, and father perceptions of his own father's nurturance with a negative beta weight. As in the regression equations which included observational data, mother's views of her own father's availability explained none of the variance in total scores.

Discussion

The hypothesis generated, that men who were highly involved in caring for their preschool children would be less stable in maintaining that arrangement than their more traditional peers, was supported by some of the findings and not supported by others. Confirming the hypothesis was the fact that men in the father primary caregiver group significantly decreased their involvement between 1977 and 1981, whereas for the most part, the fathers in the other two groups did not. The greater reduction in scores within the high father involved group cannot be attributed to a regression to the mean effect because there was virtually no change in scores in the mother primary caregiver group, the group with the least father involvement.

Further, an examination of the grand total involvement scores indicates that there was little difference in 1981 between the intermediate and high father involved groups; the mean grand total scores were 78.5 and 81.0 respectively. The difference was not significant (t=.56; 29 d.f.). However, both groups showed significantly more father involvement than the traditional group whose mean was 68.1 (t= 2.64 for the high involved father group and 3.16 for the intermediate group). The figures for grand total involvement in 1975 were 93.0, 80.9, and 67.2 for the high, moderate, and low father involvement groups respectively. Thus it appears that the most highly involved men do reduce their role in

childrearing as the youngster reaches the early elementary grades but they do not assume the role of the traditional man whose wife spends four times as much time as he does caring for their child (Robinson, 1977).

The data which tend to disconfirm the hypothesis are the correlations between father involvement in 1977 and 1981. Because they were significant only in the father primary caregiver group, it appears that the rank order of involvement for those men stayed relatively similar in the two time periods. The same statement cannot be made for the other two groups.

At least one reason for this stability may be the similarity in correlates, perhaps precursors, of father involvement scores in both years. In 1977, in the father primary caregiver group, mother's positive feelings about her own father's involvement in childcare were positively correlated with her husband's total involvement scores as were the father's perceptions of his own father's involvement. There were also indications that mother's perceptions of her own father's availability were positively correlated with her husband's involvement in childcare. Thus a modeling paradigm appeared to be operative insofar as both parents were concerned; they were replicating, to some extent, the behaviors observed in their families of origin. In 1981, when the parents' 1977 perceptions of their own father's childrearing role were correlated with father involvement scores, the same paradigm emerged. Thus, in 1977 as well as in 1981, modeling was taking place, with both mothers' and fathers' fathers serving as positive role models of the paternal role.

In contrast, in the mother primary caregiver group in 1977 some of the mother's perceptions of her own fathers' involvement were positively related to her husband's involvement and some were negatively related. Similarly, in 1977, some of the father's perceptions of his father's involvement in childcare were positively related to his own involvement and some were negatively related. In 1981, virtually all of the fathers' and mothers' views of their own fathers' involvement were negatively associated with father involvement--a compensatory paradigm or the utilization of the parents' fathers as negative role models. In the intermediate group too, the pattern was a mixture of compensation and modeling for both fathers and mothers in 1977, and primarily compensatory insofar as mothers are concerned, and a mixed picture for fathers in 1981. Thus it appears that only in the father primary caregiver group was there a consistent relationship between parents' perceptions of their fathers' involvement in their family of origin and father involvement in the current family.

The differences in stability of paternal care with boys and girls resemble the differences obtained in the three father involvement groups. For families with daughters there was a compensatory effort insofar as mothers were concerned in 1977 and 1981; women who perceived their own fathers as less available had husbands who were more involved. Whether this was the result of a selection process in choosing a mate or socialization of one spouse by another, as described by Cronkite (1977) cannot be determined without further research. For fathers of daughters, there was some indication that a positive view of his own father was related to high father involvement in 1977 and minimal linkage

between his perceptions of his own father and his role in rearing his daughter in 1981. Thus it was the mother's views of her own father's involvement in childrearing that was the dominant influence in 1977 and 1981, and in both years, the compensatory mode emerged.

The picture was quite different for families with boys for there were sharp differences insofar as fathers are concerned time 1 and time 2. In 1977, almost none of the father's perceptions of his own father were significantly linked to his involvement in childcare. In 1981, there was a strong compensatory theme with men who in 1977 perceived their fathers as less available taking a greater role in childcare in 1981. Thus an inconsistent correlational pattern was seen in paternal views of his own fathers' involvement in childrearing over a four year period.

Two other variables, demographic characteristics and observational scores, were inconsistently related to paternal involvement at times 1 and 2 in families with sons, and this fact may contribute to the lack of stability in paternal childrearing for this group. At time 2, demographic data about the father collected at time 1 were positively related to his involvement in childcare of boys, specifically his occupational rating and his total socioeconomic status (which includes ratings of education and occupation) as assessed by the Hollingshead (Note 1) Four Factor Index of Social Status. At time 1, there was almost no link between father's socioeconomic status and his involvement in childrearing when only families with sons were considered. Thus there appears to be a sleeper effect operative in which more advanced education and a more highly rated occupation in some way

facilitate fathers' caring for sons four years later. Since the same effect is not present for girls, simple explanations of less rigid stereotypes or greater job flexibility in better educated/better employed men cannot be offered. Clearly, other factors interact with job conditions before childcaring by men results.

The second variable associated with father participation in childrearing at time 2, but not at time 1 for men with sons, was his responsiveness to his child when they were observed interacting in 1977. Thus, another sleeper effect was operative. It appears that a highly interactive, nurturant father-son relationship when the child is a preschooler is predictive of greater overall father involvement in childrearing when the boy is 7 to 9 although it is not linked to overall involvement when the child is 3 to 5.

The above findings suggest that for fathers of sons, there is an interaction effect among three sleeper variables--father's perception of having been deprived of paternal care in his own childhood, father's high SES, and the existence of a responsive, interactive father-son relationship--which results in high overall father involvement in caring for the 7 to 9 year old boy. The obvious question is why this interaction is found with fathers of sons but not with fathers of daughters.

One possible explanation is that fathers identify more closely with sons as they grow into the ages of 7 to 9 from the preschool years. The boy's physical, mental, and emotional growth may all contribute to this identification. If fathers do indeed identify more closely with older boys, and now see themselves in their sons, they may use their greater freedom from sex-role

stereotypes, and perhaps greater financial resources to spend time with the boys, especially when they feel their own fathers did not spend enough time with them, and they and their sons are a highly responsive, interactive dyad. In sum, greater father identification with the older boy may serve as a trigger or catalyst activating previously dormant dimensions to produce greater father participation in childcare.

Providing further evidence of fathers' enhanced identification with their sons as the children reach the age of 7 to 9 is the finding that the amount of father involvement in childcare did not decrease significantly as the boys grew from the preschool age to early elementary school age, but father involvement did decrease significantly for girls during the same age span.

Data obtained in observational studies of family interaction in the home also support the view that there is stronger identification of fathers with sons, perhaps investment in sons, when the children are 8 than when they are 4. Russell (Note 2), in an investigation of families with 8 year old children, found that fathers responded significantly more frequently to sons than to daughters, were more likely to respond positively to initiations from sons than from daughters, and initiated more playfulness and affection with sons than with daughters. In contrast, in the time 1 study (Radin, 1982) with preschoolers, the scores for fathers of sons and for fathers of daughters on

observed paternal nurturance and total number of interactions, did not differ significantly. In addition, in an earlier observational study (Epstein & Radin, 1975; Radin & Epstein, Note 3) of father interaction with preschoolers using the same methodology, 24 of the 26 observational categories showed no differences between fathers of sons and fathers of daughters. Among the specific paternal behaviors showing no differences were verbal reinforcement, initiates and engages child in conversation, communicates affection, and stops talking to listen to child.

As for families with daughters, the initial score for father involvement and mother's perceptions of her own father as unavailable combined to account for almost 80% of the variance in the total score for father involvement in 1981. With both independent variables carrying significant beta weights, it appears that mothers' perceptions of her own paternal deprivation continue to exert influence, over and above their influence on father involvement in 1977. The fact that mothers' feelings of paternal deprivation were related to their husbands' participation in caring for daughters both in 1977 and 1981, suggests that unlike fathers, mothers identify with their same-sexed child as strongly when the youngster is preschool-aged as when the child reaches the early elementary grades.

When the total sample is considered, the resultant pattern reflects the trends apparent in the sex-of-child subgroups but in diminished fashion. For example, the total amount of variance explained was 45% in contrast to the 57% explained when only boys are considered and 79% when only girls' data are analyzed. The major reason for the decrement in the total group is that there are different predictors for each sex child. When the total

sample is analyzed, some, but not all, predictors of father involvement with boys and girls emerge: specifically, initial grand total score for father involvement, a compensatory mode insofar as fathers' views of their own fathers are concerned, and initiating behavior on the part of the children in interacting with their father. The mother's compensatory efforts are no longer significant factors. To describe the findings another way, when the children are 7 to 9 years of age, fathers appear to be the major gatekeepers of paternal involvement. When the children were 3 to 5 years of age, the mothers were the major gatekeepers (Radin, 1981a, 1982). This conclusion is in keeping with data obtained by Jacqueline Goodnow (Note 4) in a study of parents' perceptions of their influence on children. Fathers believe they have the greatest influence when the children are about 7. Mothers feel they have the greatest influence when the child is 3 to 4.

Summary

Regarding antecedents of father involvement in white, middle-class families, it appears that a number of factors are influential in determining his role in the socialization process, but they differ in importance for different family structures. These factors include parents' efforts to compensate for or model their own father's role in childcare, the nature of father interactions with the child, the sex of the child, and the father's education and occupation. Also influential but to a lesser extent are mother's education and sex-role orientation and the father's age. Thus demographic, social psychological, and intrapsychic dimensions all contribute to the determination of paternal participation in childrearing, as do the various roles

played by the parents, i.e., son, daughter, worker, male, female, spouse, well-educated individual, mother, father. Virtually irrelevant factors are father's sex role orientation, mother's age, and parents' statements regarding the nurturance of the father.

Insofar as the stability and duration of high father involvement are concerned, it appears that both stability and instability are present. There is stability in the rank ordering of fathers by amount of involvement within the group of men who are primary caregivers, but instability in the total amount of involvement. Highly participant, middle-class fathers do reduce their level of participation in childrearing as their children grow, but men with the major role in childcare do not retreat into playing a traditional, uninvolved paternal role, at least not when the children are 7 to 9 years of age. Whether this pattern is found in other social classes and among other races and ethnic groups remains to be determined.

Reference Notes

1. Hollingshead, A.B. Four-factor index of socialstatus. Unpublished manuscript, 1970. (Available from Department of Sociology, Yale University, New Haven, Connecticut).
2. Russell, G. Mother-child and father-child interactions in middle childhood. Paper presented to the Second National Conference on Child Development, Melbourne, Australia, August, 1982.
3. Radin, N., & Epstein, A. S. Observed paternal behavior and the functioning of preschool boys and girls. Paper presented at the meeting of the Society for Research on Child Development, Denver, April, 1975.
4. Goodnow, J. Personal communication, February 8, 1983.

References

Aldous, J. The making of family roles and family change. The Family Coordinator , 1974, 23, 231-235.

Belsky, J. Mother-father-infant interaction: A naturalistic observational study. Developmental Psychology, 1979, 15, 601-607.

Bem, S. L. The measurement of psychological androgyny. Journal of Consulting and Clinical Psychology, 1974, 42, 155-162.

Biddle, B. J., & Thomas, E. J. (Eds.). Role theory:Concepts and research. N.Y.: Wiley, 1966.

Carlson, B. E. Shared vs. maternal childrearing: Effects of dual careers on families with young children. Unpublished dissertation, University of Michigan, Ann Arbor, Michigan, 1980.

Carlson, B. E. Preschoolers' sex-role identity, father-role perceptions, and paternal family participation. Journal of Family Issues, 1981, 2, 238-255.

Clarke-Stewart, K. A. And daddy makes three; The father's impact on mother and young child. Child Development, 1978, 49, 466-478.

Cronkite, R. C. The determinants of spouses' normative preference for family roles. Journal of Marriage and the Family, 1977, 39, 575-586.

Epstein, A. S., & Radin, N. Motivational components related

to father behavior and cognitive functioning in preschoolers. Child Development, 1975, 46, 831-839.

Feld, S., & Radin, N. Social psychology for social work and the mental health professions. N.Y.: Columbia University Press, 1982.

Field, T. Interaction behaviors of primary versus secondary caretaker fathers. Developmental Psychology, 1978, 14, 183-184.

Gersick, K. E. Fathers by choice: Divorced men who receive custody of their children. In G. Levinger & O. C. Moles (Eds.), Divorce and separation. N.Y.: Basic Books, 1979.

Lamb, M. E. Father-infant and mother-infant interaction in the first year of life. Child Development, 1977, 48, 167-181.

Lamb, M. E. (Ed.), The role of the father in child development. 2nd Ed. N.Y.: Wiley, 1981.

Lamb, M. E., Frodi, A. M., Hwang, C-P., & Frodi, M. Varying degree of paternal involvement in infant care: Attitudinal and behavioral correlates. In M. E. Lamb (Ed.), Nontraditional Families: Parenting and child development, Hillsdale, N. J.: Lawrence Erlbaum Associates, 1982.

Levine, J. A. Who will raise the children? New options for fathers (and mothers). N.Y.: Lippincott, 1976.

Mendes, H. A. Single fatherhood. Social Work, 1976, 21, 308-312.

Parke, R. D. Perspectives on father-infant interaction. In

J. Osofsky (Ed.), Handbook of infancy. New York: Wiley, 1979.

Parke, R. D., & Sawin, D. B. The father's role in infancy: A re-evaluation. The Family Coordinator, 1976, 25, 365-371.

Parke, R. D., & Sawin, D. B. The family in early infancy: Social interactional and attitudinal analyses. In F. Pedersen (Ed.), The father-infant relationship, observational studies in a family context. N.Y.: Praeger, 1980.

Pleck, J. H. Men's family world: Three perspectives and some new data. The Family Coordinator, 1979, 28, 481-488.

Radin, N. Childrearing antecedents of cognitive development in lower-class preschool children. (Doctoral dissertation, University of Michigan, 1969). Dissertation Abstract International, 1970, 30, 4364B (University Microfilms No. 70-4170).

Radin, N. Maternal warmth, achievement motivation, and cognitive functioning in lower-class preschool children. Child Development, 1971, 42, 1560-1565.

Radin, N. Father-child interaction and the intellectual functioning of four-year-old boys. Developmental Psychology, 1972, 6, 353-361.

Radin, N. Childrearing fathers in intact families with preschoolers. Paper presented at the annual meeting of the American Psychological Association, Toronto, September 1978. (ERIC Document Reprod. Service No. Ed

194 850).

Radin, N. Childrearing fathers in intact families, I: Some antecedents and consequences. Merrill-Palmer Quarterly, 1981, 27 489-514. (a)

Radin, N. The role of the father in cognitive, academic, and intellectual development. In M. E. Lamb (Ed.), The role of the father in child development. 2nd Ed. N.Y.: Wiley, 1981. (b)

Radin, N. Primary caregiving and role-sharing fathers. In M. E. Lamb (Ed.), Nontraditional Families: Parenting and child development, Hillsdale, N, J.: Lawrence Erlbaum Associates, 1982.

Radin, N., & Epstein, A. Observed paternal behavior with preschool children: Final report. Ann Arbor, Michigan. The University of Michigan, School of Social Work, 1975. (ERIC Document Reproduction Service No. ED 174 656)

Radin, N., & Russell, G. The effect of fathers on child development: A consideration of traditional families and those with highly involved fathers. In M. E. Lamb & A. Sagi (Eds.), Fatherhood social policy, Hillsdale, N. J.: Lawrence Erlbaum Associates, 1983. .

Radin, N., & Sagi, A. Childrearing fathers in intact families in Israel and the U.S.A. Merrill-Palmer Quarterly, 1982, 28, 111-136.

Robinson, J. P. How Americans use their time. N.Y.: Praeger Publishers, 1977.

Russell, G. The father role and its relation to masculinity, femininity, and androgyny. Child Development, 1978, 49

1174-1181.

Russell, G. Shared-caregiving families: An Australian study. In M. E. Lamb (Ed.), Nontraditional Families: Parenting and child development, Hillsdale, N. J.: Lawrence Erlbaum Associates, 1982.

Sagi, A. Antecedents and consequences of various degrees of paternal involvement in childrearing: The Israeli project. In M. E. Lamb (Ed.), Nontraditional families: Parenting and child development. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1982.

Santrock, J. W., & Warshak, R. A. Father custody and social development in boys and girls. Journal of Social Issues, 1979, 35, 112-125.

Tauber. M. A. Sex differences in parent-child interaction styles during a free-play session. Child Development, 1979, 50, 981-988.

Weinraub, M., & Frankel, J. Sex differences in parent-infant interaction during free play, departure, and separation. Child Development, 1977, 48, 1240-1249.

TABLE 1: Significant Differences Between Time 1 Minus Time 2 Scores

Group	N	Father Involvement Variable	Mean 1977	Mean 1981	t Value
Total	47	Grand Total	80.5	75.8	2.66*
		Mother Total	39.9	37.2	2.73*
		Mother Components:			
		Socialization	4.4	3.8	2.91*
		Childcare	4.5	3.9	2.94*
Boys	24	Father Components:			
		Decision Making	6.5	6.0	2.33*
Girls	23	Grand Total	80.9	76.4	3.75***
		Mother Total	40.4	37.7	3.14**
		Mother Components:			
		Socialization	4.6	4.0	2.38*
		Childcare	4.8	4.0	2.32*
Mother Primary Caregiver	16	Father Components:			
		Statement of Involvement	13.2	14.4	-2.28*
		Decision Making	6.1	5.4	2.40*
Inter-mediate	16	Father Component:			
		Decision Making	5.8	6.4	-2.42*
Father Primary Caregiver	15	Grand Total	93.0	81.0	3.81**
		Mother Total	45.8	40.0	3.39**
		Father Total	46.9	41.0	3.39**
		Mother Components:			
		Socialization	5.0	4.1	2.67*
		Childcare	6.0	4.2	3.96***
		Father Components:			
		Statement of Involvement	18.9	16.6	2.45*
		Socialization	5.2	4.3	2.36*
		Childcare	5.6	4.2	2.58*
		Decision Making	7.1	6.1	2.64*

*p < .05 d.f.=n-1
**p < .01 d.f.=n-1
***p < .001 d.f.=n-1

TABLE 2: Time 1 Variables and Time 2 Total Scores for Father Involvement by Father Involvement Group--Significant Correlations

Group	Time 1 Category	Time 1 Predictor	Time 2 Score	N	r
Mother Prime Caregiver	Father Involve Scores	None			
	Grandfather Variables	Mother GF State. Inv.	Father Total	16	-.56*
		Mother GF State. Inv.	Grand Total	16	-.56*
		Mother Feels re: GF	Mother Total	16	-.53*
		Father GF State. Inv.	Mother Total	16	-.50*
		Father GF Nurturance	Mother Total	16	-.56*
	Demographic Variables	Mother Education	Mother Total	16	.65**
		Mother Education	Grand Total	16	.63**
		Sex of Child (a)	Father Total	16	-.59*
	Observation Variables	None			
Intermediate	Father Involve Scores	None			
	Grandfather Variables	Mother GF Available	Father Total	16	-.53*
		Mother GF Dec. Making	Father Total	12	-.59*
		Mother Total GF Score	Father Total	12	-.62*
		Father GF Dec. Making	Father Total	15	.52*
		Father GF Nurturance	Mother Total	15	-.55*
		Father GF Nurturance	Grand Total	15	-.53*
	Demographic Variables	Father Age	Mother Total	15	.50*
	Observation Variables	None			
Father Prime Caregiver	Father Involve Scores	Mother Total	Father Total	15	.56*
		Mother Total	Mother Total	15	.68**
		Mother Total	Grand Total	15	.65**
		Grand Total	Father Total	15	.60*
		Grand Total	Mother Total	15	.67**
		Grand Total	Grand Total	15	.66**
	Grandfather Variables	Mother GF State. Inv.	Father Total	14	.57*
		Mother GF Nurturance	Father Total	12	.65*
		Father GF Available	Father Total	14	.54*
	Demographic Variables	None			
	Observation Variables	None			

Note: (a) 1=boys; 2=girls
See Note, Table 3

*p < .05 d.f.=n-2
**p < .01 d.f.=n-2

TABLE 3: Time 1 Variables and Time 2 Total Scores for Father Involvement by Sex of Child--Significant Correlations

Group	Time 1 Category	Time 1 Predictor	Time 2 Score	N	r
Boys	Father Involve Scores	None			
	Grandfather Variables	Father GF State. Inv.	Mother Total	24	-.41*
		Father GF State. Inv.	Grand Total	24	-.43*
	Demographic Variables	Father Occup. Rating	Mother Total	22	.44*
		Father SES	Mother Total	22	.45*
		Father SES	Grand Total	22	.44*
	Observation Variables	Father Nurturance	Father Total	23	.41*
		Total # Interactions	Father Total	23	.50*
		Child Initiations	Father Total	22	.49*
Girls	Father Involve Scores	Father Total	Father Total	23	.73***
		Father Total	Mother Total	23	.77***
		Father Total	Grand Total	23	.77***
		Mother Total	Father Total	23	.74***
		Mother Total	Mother Total	23	.83***
		Mother Total	Grand Total	23	.84***
		Grand Total	Father Total	23	.80***
		Grand Total	Mother Total	23	.86***
		Grand Total	Grand Total	23	.88***
	Grandfather Variable	Mother GF Available	Father Total	22	-.43*
		Mother GF Available	Mother Total	22	-.70***
		Mother GF Available	Grand Total	22	-.56**
	Demographic Variables	None			
	Observation Variables	None			

Note: "Father Involve Score" refers to the three total scores for father involvement; "Grandfather Variables" and the abbreviation, "GF", refer to parents' perceptions of their own fathers.

*p < .05 d.f.=n-2
**p < .01 d.f.=n-2
***p < .001 d.f.=n-2

TABLE 4: Time 1 Variables and Time 2 Total Scores for Father Involvement for the Total Sample--Significant Correlations

Time 1 Category	Time 1 Predictor	Time 2 Score	N	r
Father Involve Scores	Father Total	Father Total	47	.48***
	Father Total	Mother Total	47	.41**
	Father Total	Grand Total	47	.47***
	Mother Total	Mother Total	47	.56***
	Mother Total	Grand Total	47	.57***
	Grand Total	Father Total	47	.53***
	Grand Total	Mother Total	47	.52***
	Grand Total	Grand Total	47	.52***
Grandfather Variables	Mother GF Available	Mother Total	45	-.33*
	Mother GF Available	Grand Total	45	-.31*
	Father GF Nurturance	Mother Total	45	-.30*
Demographic Variables	None			
Observation Variables	Total # Interactions	Father Total	44	.36*
	Father Nurturance	Father Total	44	.30*
	Child Initiations	Father Total	42	.42**
	Child Initiations	Grand Total	42	.31*

Note: See Note, Table 3

*p < .05 d.f.=n-2
**p < .01 d.f.=n-2
***p < .001 d.f.=n-2

TABLE 5: Regression Equations with at Least Two Significant Beta Weights, One of Which Is for an Observational Variable

Group	Dependent Variables- Time 2	N	Mult. R	% Var Expl	Independent Variables- Time 1	Beta Weight Stand.	% Var. Expl. by Ind. Vars.
Total	Grand Total	38	.67	45	Grand Total Score	.49***	32
					Father GF Nurturance	-.31*	06
					Child Initiations	.29*	07
					Mother GF Available	N.S.	--
	Father Total	40	.65	43	Grand Total Score	.47***	29
					Observed Father Nurt.	.34**	07
					Father GF Nurturance	-.26*	07
					Mother GF Available	N.S.	--
	Father Total	40	.69	48	Grand Total Score	.44***	29
					Total # Interactions	.42**	10
					Father GF Nurturance	-.30*	09
					Mother GF Available	N.S.	--
	Father Total	38	.69	48	Grand Total Score	.44**	29
					Child Initiations	.42**	12
					Father GF Nurturance	-.26*	07
					Mother GF Available	N.S.	--
Boys	Father Total	21	.75	57	Father GF State. Inv	-.53**	25
					Total # Interactions	.46*	19
					Father SES	.36*	13
	Father Total	20	.73	53	Father GF State. Inv	-.50*	26
					Child Initiations	.43*	14
					Father SES	.37*	13

Note: See Note, Table 3

*p < .05 d.f.=n-1
**p < .01 d.f.=n-1
***p < .001 d.f.=n-1

TABLE 6: Regression Equations Computed without Observational Data and Having at Least Two Significant Beta Weights

Group	Dependent Variables- Time 2	N	Mult. R	% Var Expl	Independent Variables- Time 1	Beta Weight Stand.	% Var. Expl. by Ind. Vars.
Total	Grand Total	45	.62	38	Grand Total Score	.55***	31
					Father GF Nurturance	-.26*	07
					Mother GF Available	N.S.	--
	Mother Total	45	.59	35	Grand Total Score	.52***	27
					Father GF Nurturance	-.30*	08
					Mother GF Available	N.S.	--
Boys	Grand Total	22	.70	49	Father GF State. Inv	-.55**	33
					Father SES	.40*	16
	Mother Total	22	.69	47	Father GF State. Inv	-.52**	30
					Father SES	.42*	17
Girls	Mother Total	22	.89	79	Grand Total Score	.74***	75
					Mother GF Available	-.25*	04

Note: See Note, Table 3

*p < .05 d.f.=n-1
**p < .01 d.f.=n-1
***p < .001 d.f.=n-1